

ABSTRACT OF THE DISCLOSURE

A method of providing fuel cell start-up without battery derived compressor power is provided. The method includes introducing hydrogen to the anode inlet of a fuel cell stack previously purged with air. The introduced hydrogen in the anode channels and the existing air in the cathode channels generate a small amount of voltage to begin to drive the air compressor. As additional air is introduced into the cathode channels by the slowly starting compressor, the fuel cell stack produces more voltage until the system is producing sufficient net power to operate under normal run control conditions.